Reviewer's report

Title: Understanding key factors affecting electronic medical record implementation: a socio-technical approach

Version: 2
Date: 4 February 2015
Reviewer: Christine Urquhart

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Understanding key factors, electronic medical record implementation

General comments. My main concern with this paper is that many people reading this would wonder what is new. I realise that the purpose of ANT is mostly descriptive, rather than explanatory, but even so, I found the treatment of ANT came across as very bland. I think I would have found the description of translation more convincing if the authors had been able to identify the “obligatory passage point”, for example. Many of my concerns probably concern the timing of the research which relied on retrospective accounts, and the rather rosy accounts in hindsight I found a little unconvincing, to be honest. I would also have preferred to see interviews with staff that used the system on a daily basis – senior staff may, after all, wish to be diplomatic in their responses. I know the processes of translation do not necessarily follow neatly after each other but many readers might want to know more about the identified changes that signalled that interessement had happened, for example. I would also like to see more discussion about the ways in which changes in documentation practice occurred, and how interactions among the professional roles might have changed once the inscription stage was reached.

Major compulsory changes

1. Justification for the choice of staff sampled – why so many senior staff?
2. More detail about the way the data collection analysis was done. How, exactly, were the data from the documentary analysis integrated with the interviews? Did the document analysis inform the interviews in any way? How was the interview schedule drawn up?
3. Please integrate the appendix into the main text. This will help to make the text more interesting (particularly as many people might have been able to write your recommendations ten years ago, albeit on the basis of experience rather than a vast amount of research evidence).
4. Please try to identify the range of activities, roles, for each stage of translation a little more clearly. You may need to review your interview data again. I worry that you have simply used one quote to illustrate a point in several places – and you do not always indicate whether this is “representative” or just a convenient “star quote”.
5. As your recommendations only really confirm accepted knowledge about the factors governing successful systems implementation, you will need to make the
ANT analysis more detailed, to illustrate those stages of translation, any identified “obligatory passage point” and just how the staff were enrolled. You don’t mention training on the system? Roles were covered in the earlier stages of translation but the later stages lacked some detail about roles and interactions.

6. The description of the observations was interesting, and I think more could be made of this. There could be more about the way staff roles interacted with each other and the EMR? Readers might be interested in the way particular staff roles interacted around the EMR – more could be made of this.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.